

# E-5324

Catalog No: tcsc0014924



## Available Sizes

**Size:** 1mg

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

141799-76-0

**Formula:**

$C_{26}H_{34}N_4O_2$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Acyltransferase

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

434.57

## Product Description

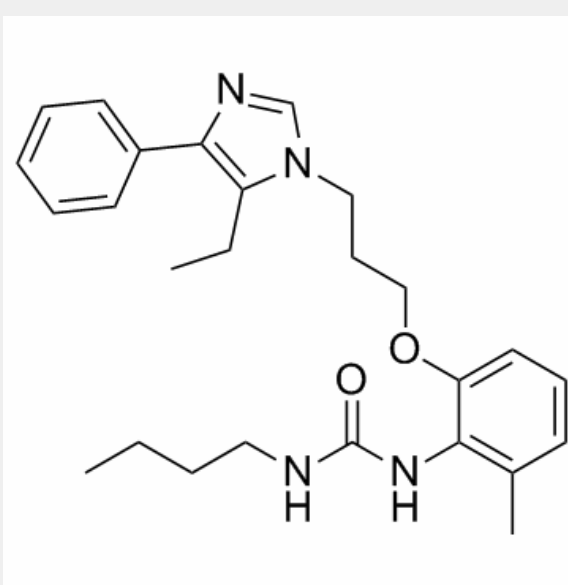
E-5324 is potent inhibitor of acyl-CoA:cholesterol acyltransferase (**ACAT**) with **IC<sub>50</sub>**s of 44 to 190 nM.

IC50 & Target: IC50: 44 to 190 nM (ACAT)<sup>[1]</sup>

***In Vitro:***

E-5324 is a potent ACAT inhibitor with  $IC_{50}$ s of 44 to 190 nM in microsomes. E-5324 shows no effect on triglyceride synthesis up to 10  $\mu$ M. E-5324 also has no effect on bovine pancreatic cholesterol esterase or lecithin: cholesterol acyltransferase (LCAT) up to 10  $\mu$ M. E-5324 inhibits the incorporation of [ $^3$ H]oleate into cholesteryl [ $^3$ H]oleate in a concentration-dependent manner with an  $IC_{50}$  of 0.44  $\mu$ M. E-5324 also inhibits [ $^3$ H]cholesteryl ester synthesis with an  $IC_{50}$  of 0.41  $\mu$ M<sup>[1]</sup>.

**In Vivo:** The areas under the cholesterol-time curves for duration of this study (AUC) for control, E-5324 0.02% and E-5324 0.1% are  $104985 \pm 4411$ ,  $106096 \pm 4476$  and  $105231 \pm 4348$  mg $\times$ day/dL, respectively. The high dose of E-5324 (0.1%) significantly reduces the surface involvement by 34% and 54% in the aortic arch and thoracic aorta, respectively. E-5324 treatment significantly reduces the wet weight and protein content. In the aortic arch, the high dose of E-5324 (0.1%) significantly reduces both cholesteryl ester and total cholesterol by 60% and 59%, respectively. The high dose of E-5324 (0.1%) markedly reduces the ACAT activities in the aortic arch and thoracic aorta by 35% and 44%, respectively<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!